## WHAT IS CLAIMED IS

- 1. A bit error measurement apparatus for measuring a bit error of a transmission network through which transmission of a packet having digital data to be transmitted is executed, comprising:
- a packet extraction means for extracting an equivalence packet whose all of said digital data should have the same values from among said packets transmitted through said transmission network;
- a data comparison means for comparing said digital data of said equivalence packet to comparison data that should have the value of said digital data of said equivalence packet; and

an error judgment means for judging the data as an error when result of said comparison is disagreement.

- 2. A bit error measurement apparatus according to claim 1, wherein said comparison data is either 0 or 1.
- 3. A bit error measurement method for measuring a bit error of a transmission network through which transmission of a packet having digital data to be transmitted is executed, comprising:

a packet extraction step for extracting an equivalence packet whose all of said digital data should have the same values from among said packets transmitted through said transmission network;

a data comparison step for comparing said digital data of said equivalence packet to comparison data that should have the value of said digital data of said equivalence packet; and

an error judgment step for judging the data as an error when result of said comparison is disagreement.

4. A computer-readable medium having a program of instructions for execution by the computer to perform a bit error measurement process for measuring a bit error of a transmission network through which transmission of a packet having digital data to be transmitted is executed, comprising:

a packet extraction processing for extracting an equivalence packet whose all of said digital data should have the same values from among said packets transmitted through said transmission network;

a data comparison processing for comparing said digital data of said equivalence packet to comparison data that should have the value of said digital data of said equivalence packet; and

an error judgment processing for judging the data as an error when result of said comparison is disagreement.

5. A bit error measurement apparatus for measuring a bit error of a transmission network through which transmission of a packet with digital data to be transmitted is executed, comprising:

a packet extraction means for extracting a packet for measurement to measure a bit error from among said packets transmitted through said transmission network;

a data comparison means for comparing said digital data of said packet for measurement to comparison data that should have the value of said digital data of said packet for measurement; and

an error judgment means for judging the data as an error when result of

said comparison is disagreement.

- A bit error measurement apparatus according to claim 5, wherein said comparison data is a pseudo-random signal.
- 7. A bit error measurement method for measuring a bit error of a transmission network through which transmission of a packet with digital data to be transmitted is executed, comprising:
- a packet extraction step for extracting a packet for measurement to measure a bit error from among said packets transmitted through said transmission network:
- a data comparison step for comparing said digital data of said packet for measurement to comparison data that should have the value of said digital data of said packet for measurement; and
- an error judgment step for judging the data as an error when result of said comparison is disagreement.
- 8. A computer readable medium having a program of instructions for execution by the computer to perform a bit error measurement process for measuring a bit error of a transmission network through which transmission of a packet having digital data to be transmitted is executed, comprising:
- a packet extraction processing for extracting a packet for measurement to measure a bit error from among said packets transmitted through said transmission network;
- a data comparison processing for comparing said digital data of said packet for measurement to comparison data that should have the value of said

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digital data of said packet for measurement; and

an error judgment processing for judging the data as an error when result of said comparison is disagreement.